ASSESSMENT OF ARCHAEOLOGICAL SITE 38CH2242, MULLET HALL PLANTATION, JOHNS ISLAND, CHARLESTON COUNTY, SOUTH CAROLINA

Chicora Research Contribution 581

ASSESSMENT OF ARCHAEOLOGICAL SITE 38CH2242, MULLET HALL PLANTATION, JOHNS ISLAND, CHARLESTON COUNTY, SOUTH CAROLINA

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Introduction

Previous Archaeological Investigations

Initial investigations, consisting of a reconnaissance level study, were conducted in 1994 (Adams and Trinkley 1994:31). Site 38CH2242 was not, however, identified until the subsequent intensive survey in 2008. Encountered during routine shovel testing, this testing was expanded eventually including 65 tests at 50-foot intervals. Twenty-two of these tests (34%) were positive, producing 113 specimens, 69 of which were colono sherds (61%). The testing also recovered 21 prehistoric sherds, but all of them were small (under 1-inch in diameter). The pattern analysis suggested the site was occupied by enslaved African Americans. Too few datable ceramics were recovered to allow for reliable use of mean ceramic dating, although the site was thought to be eighteenth century based on the abundance of colono pottery (Trinkley et al. 2008:150-152).

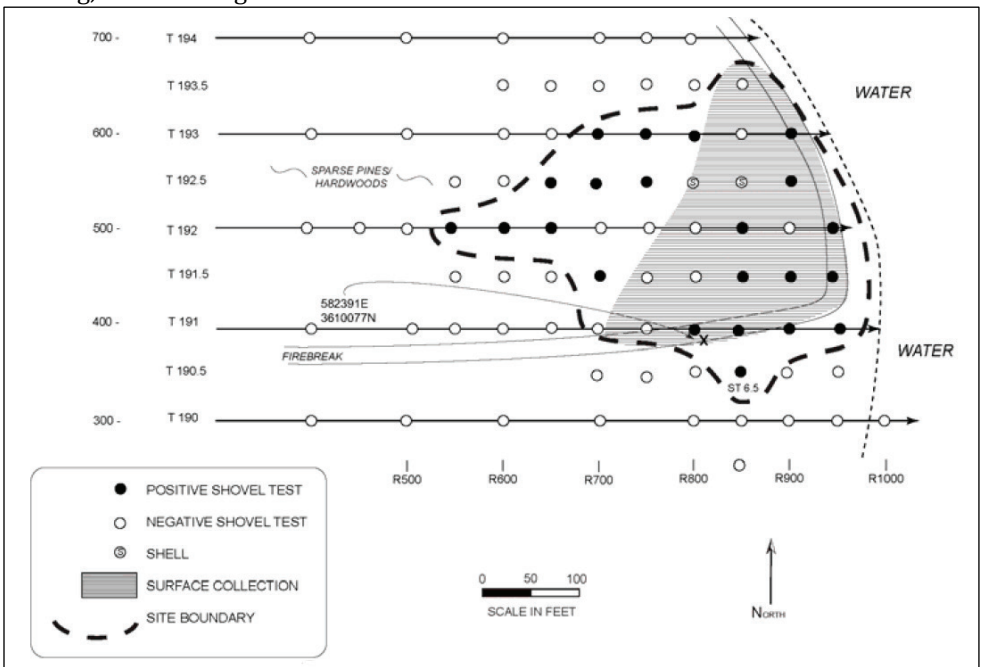

Figure 1. Sketch plan of 38CH2242 from 2008.

At the time the site was recommended "potentially eligible," today interpreted to mean that additional testing was necessary to clarify eligibility. Our concern at the time included better dating, identification of features, and a better determination of site function. We recommended close interval auger testing coupled with several large formal test units to determine if features, such as wall trench structures, might be present. Consequently, the justification for additional research was almost identical to that for 38CH1543. It seemed imprudent to dismiss a site for which we were unable to ascertain a function. Doing so would effectively discard a portion of the Mullet Hall puzzle and present a sound interpretation of the plantation landscape.

The site, centered at a UTM of 582409E

3610097N (NAD 27), was thought to extend over an area about 400-feet east-west by 300-feet north-south (Figure 1).

Historical Synthesis for the Colonial Period

Mullet Hall did not produce an abundance of early historic documentation. Further complicating explanations, the original study tract was historically made up of at least four plantations: Mullet Hall, "Home Place," Rosebank, and The Oaks. Site 38CH2242, however, was found on none of these previously researched plantations. Instead, it was apparently owned by a James Witter, whose estate is shown on the undated (but ca. 1800) plat as owning the tract south of Thomas Mullet's property. Researchers should be aware that there was also a James Witter living contemporaneously on James Island, making it difficult to develop a cogent history.

As early as 1753 Witter, already on Johns Island, was attempting to sell a parcel "fronting on Bobicket-Creek" (*South Carolina Gazette*, June 12, 1753). In 1760 and 1780 he was listed on the Petit Jury List (SC Department of Archives and History, Jury Lists, 1757, Acts 863, pg. 7; Jury Lists, 1778, Acts 1078, pg. 3). In 1773, Witter's overseer, William Boone, advertised that a horse strayed onto Witter's Johns Island property (*South Carolina Gazette*, July 19, 1773). The next year Witter was advertising the sale of 150 bushels of flint corn on his Johns Island plantation (*South Carolina Gazette*, June 24, 1774). Witter was also associated with St. John's Parish Vestry and was responsible for collecting the island's assessment for the poor (*South Carolina Gazette*, September 16, 1774).

In 1784 Witter's daughter Betsy was married to Jeremiah Hutchinson of Charleston on the Johns Island plantation (*South Carolina Weekly Gazette*, June 9, 1784).

In 1790 we learn a little about his plantation, finding an advertisement for the sale of "Warranted Sea Shore Indigo Seed" (*The City Gazette*, May 22, 1790) and by the end of the year Witter was advertising for an overseer "to take charge of an indigo plantation" on Johns Island (*The City Gazette*, December 9, 1790).

Witter also appears in the 1790 federal census, listing in his household one male (presumably himself), three females, and nine slaves (suggesting a relatively modest plantation).

Sometime prior to February 14, 1794, James Witter "of Johns Island" died intestate and Jane Witter applied for her letter of Administration (since James had a daughter, Jane, it is uncertain if this was his wife or daughter). The estate was inventoried by David Ramsay and John Reid, who found that it was valued "not exceeding eight hundred pounds" (*Letters of Administration, Testamentary and Guardianship, 1775-1869*, Charleston County Probate Court).

It seems that his plantation continued being operated by his daughter, Susanna. In 1809 she was listed in a Charleston directory as a Johns Island planter (Hrabowski 1809). An 1816 plat of Benjamin Roper's Oaks Plantation (McCrady 4577) shows the land to the south as "Heirs of James Witter, decd." The plat of Thomas Mullet's land (McCrady 4608) also shows "James Witters" to the south.

The 1820 federal census identified "Miss S. Witter" on Johns Island. The white household consisted of one female between 10 and 15 years old, one female between 16 and 18, and three females 45 years old or older. There were 118 enslaved African Americans on the plantation, a considerably larger population that we found in the 1790 census where only nine slaves were listed.

In the 1830 census only slaves are enumerated, suggesting that Susanna may have been living in Charleston. A decade after the 1820 census, the slave population had fallen to 42.

The will and estate papers for Susanna Witter, described as "late of Johns Island Spinster," suggest that she died sometime between 1840 and 1851. Prior to her death, it seems that she was

Figure 2. Undated plat of Thomas Mullet's Johns Island property conveyed to James Legare (McCrady Plat 4608) at the top; below is a modern topographic map (Wadmalaw Island, Legareville, Rockville, and Kiawah Island) showing the Mullet Hall property in blue. Red shows the current development tract.

disposing of her Johns Island property.

The plantation was partitioned, with three shares held by various family members. In 1839 Solomon Legare extended his "Home Place" to the south, acquiring most of James Witter's 238-acre tract on Kiawah River and Coles Creek. This plantation had been divided into thirds: for $4,753 Susannah Witter conveyed to Legare one-third (79.3 acres) of the land, and an undivided half-share of another third (RMC Deed Book V10, pg. 607). The remaining third, the southwest corner, was held by Mrs. Jane Holmes (the widow of John Holmes of nearby Hope Plantation, Jane was Susannah Witter's sister, and her parcel, too, eventually came into Mullet Hall). Upon Miss Witter's death, by prior agreement her executor conveyed an additional 100 acres to Solomon Legare in 1849. The boundaries were described as north partly on Solomon Legare (Home Place), partly on M. Jenkins Roper (The Oaks), east on M. J. Roper (The Oaks), west on Coles' Creek, south on marshes of Kiawah River (Charleston County RMC DB E11, p. 418).

Solomon Legare owned his Home Plantation, the east half of Mullet Hall, together with the Witter tract, until his death in 1878.

This brief overview reveals that the first owner we can document for the parcel south of Mullet Hall was James Witter. At his death prior to February 1794 the property was partitioned, although his daughter Susanna continued operating the entire plantation into the nineteenth century, eventually selling the plantation to Solomon Legare. It is likely that the main settlement associated with the Witter plantation is contained in archaeological site 38CH1547.

At first glance it seems reasonable to compare 38CH2242 to 38CH1543. Both appear to be colonial slave settlements. Like 38CH1543, it seems unlikely that 38CH2242 could house 1188 slaves, suggesting that it may have been abandoned when James Witter died and a new, larger slave settlement was established by his daughter, Susanna Witter.

Figure 3 shows a variety of aerial photographs documenting plowing and other activities in the vicinity of the site during the early to mid-twentieth century. The earliest image available, from 1938, shows much of the inland area had been under cultivation, but a number of small trees were overtaking the acreage. A wooded slough ran to the southwest north of the site. Only a decade later, in 1948, the causeway linking the tract with the mainland had been constructed and the parcel was being more consistently plowed. In addition, some of the trees had been removed. The slough is no longer visible north of the site, suggesting that it was filled in by plowing. Even more interior vegetation was removed by 1957, although the fringe along the marsh was in spotty maritime forest. There is only one drainage ditch, north of 38CH2242 running across the property east-west. By 1971 a number of drains had been installed although the fringe along the marsh edge at 38CH2242 was even more pronounced, suggesting that plowing had given up some of the marsh frontage.

By 1999 the fields east of the access road, along the marsh, were no longer being cultivated and had begun to be taken over by second growth. This conversion was largely complete by 2003, although a small field northwest of 38CH2242 was still in cultivation. A number of roads were being cut through the second growth, likely for hunting purposes. By 2006 even the previously open field north of the site was fully wooded. The vegetation pattern changed by 2010, suggesting that the area was either logged or otherwise cleared, and new trees were planted. By 2014 the property had assumed its modern appearance, fully forested.

Memorandum of Agreement

A Memorandum of Agreement (MOA) was approved by the State Historic Preservation Office (signed August 17, 2015), the Corps of Engineers (signed September 3, 2015), and Kiawah River Plantation Holdings (signed August 6, 2015) in partial fulfillment of Permit Number SAC-2008-0l605-2IG. The MOA specified that additional work would be conducted at 38CH2242 prior to any ground disturbing activities. The goal of this work

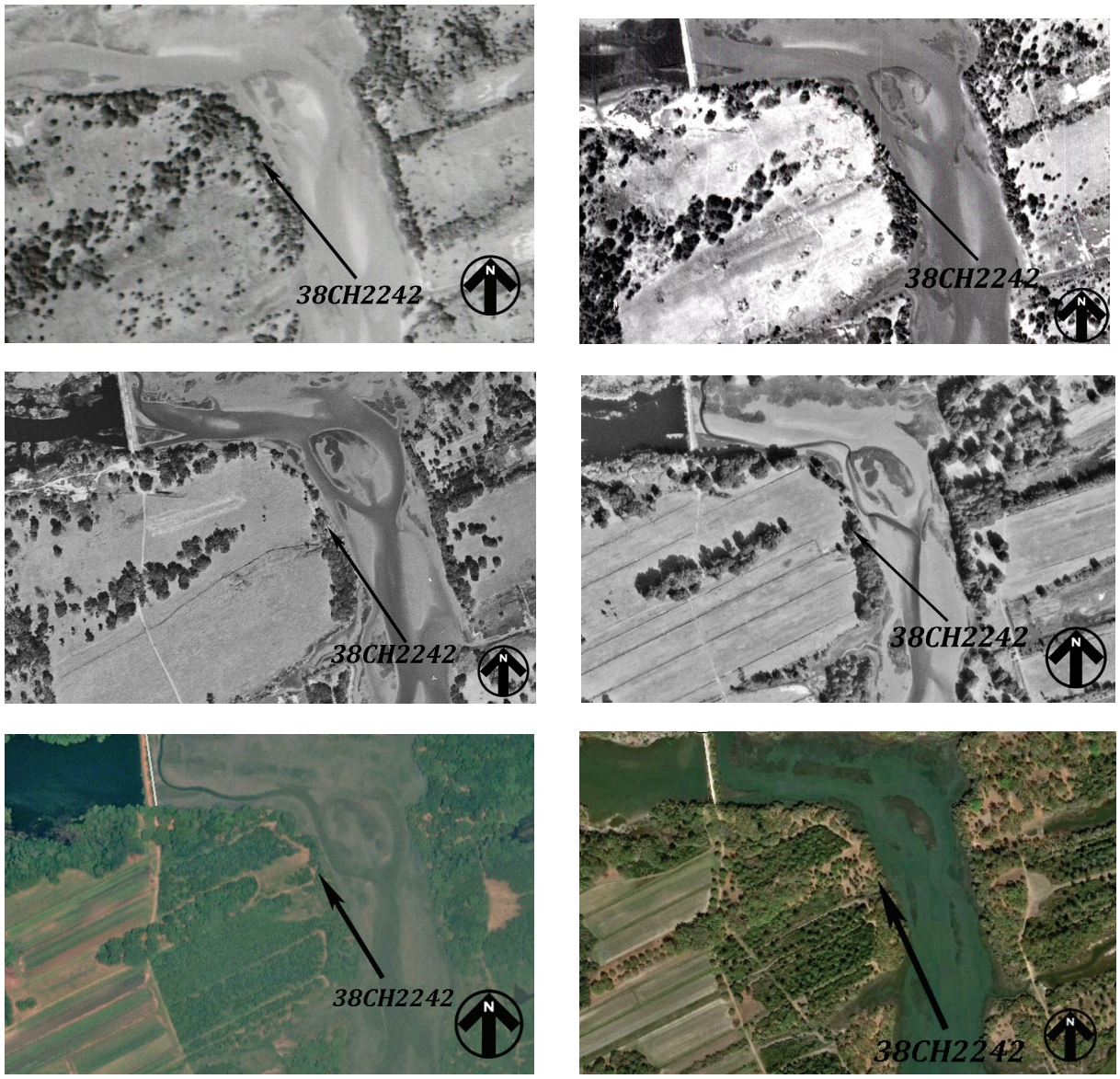

Figure 3. Aerials of 38CH2242 and its change over time. Upper left, 1938. Upper right 1948. Middle left, 1957. Middle right, 1971. Lower left, 2003. Lower right, 2017. Significant changes include variation in plowing, the gradual reforestation of the site, and evidence that it was only a narrow strip along the edge of the marsh that was never plowed.

Figure 4. Site 38CH2242 from the access road looking south after bush hogging; the marsh is to the left.

was to allow the site to be assessed for its National Register eligibility.

A testing plan for 38CH2242 was prepared by Chicora Foundation and was submitted to the signatory parties on October 3, 2016. The plan was approved by the State Historic Preservation Office on December 13, 2016 and the Corps by the end of December. This report provides the information required to fulfill this plan and allow 38CH2242 to be further evaluated for its archaeological and historical contributions.

Field Methods

Introduction

The field crew for this project consisted of Andrew Hyder, Kyndra Beatty, Lincoln Caldwell, Rachael Hutchison, Katrina Newburn, and Marly Richison. Debi Hacker is conducting laboratory processing. The principal investigator and field director, Michael Trinkley, was on-site throughout the project. The field investigations began on April 27 and continued through May 9, 2017. A total of 354 person hours were devoted to the investigations that opened 600 square feet and excavated 766.6 cubic feet.

Our initial investigations at 38CH2242 used shovel testing excavated by natural strata (although not all shovel tests penetrated the B-horizon because of depth), but we identified no stratigraphy not associated with plowing.

Although the site was shovel tested at 50-foot intervals during the previous survey, during the intervening years it became impossible to reconstruct the original grid. This made it difficult, if not impossible, to cost-effectively conduct block excavations.

As a result, we determined the best approach would be to further explore the site area, not only ensuring that we incorporated the entire site, especially to the north and south, but also that we used a method that obtained the best information possible to guide excavations.

The client's surveyors, Thomas and Hutton, established a skeleton site grid at 50-foot intervals for horizontal control. We used a modified Chicago grid system. Such a system assumes an off-site 0R0 point and the southeast corner of each unit designates the feet north and right (or east) of this arbitrary 0R0 point. Hence, the southeast corner of unit 10R50 would be 10 feet north and 50 feet right, or east, of the 0R0 point.

The surveyors' grid is tied into the South Carolina State Plane Coordinate system so it can be easily reconstructed and so excavations at different sites could be correlated, if necessary. Thus, our point 340R380 at 38CH2242 is also N290,100 E2,270,500.

Vertical control at the site uses a datum at 280R392 established by Thomas and Hutton. This datum has an elevation of 10.56 feet and is tied into the North American Vertical Datum of 1988 (NAVD 88). All elevations were taken in relation to this point, allowing widely separated areas of the site to be precisely compared (as well as comparing one site to another).

Using the 50-foot interval, we further gridded the site into 20-foot blocks for the first phase of investigation at the site.

Auger Testing

For the next phase of investigations, we chose to conduct auger testing to determine the close interval spatial distribution of key artifacts in order to indicate possible structural locations. We have decades of experience using this technique with numerous reports demonstrating that it can successfully indicate structural or occupational areas. In addition to Chicora's work, the same technique has been used by the National Park Service, with its outstanding record of archaeological protection and investigation.

In 1999 at Magnolia Plantation, archaeologist Dr. Bennie Keel excavated 1,206

auger tests over the 18-acre plantation and was able to ascertain a variety of structures. Keel commented, "the comprehensive auger testing program provides an understanding of the distribution of archaeological remains at the park." He goes on to specify the use of 25-foot intervals, based not only on this project, but also on his work at the Charles Pinckney site in Charleston County (Keel 1999).

In 2000, National Park Service Archaeologists Christina E. Miller and Susan E. Wood again used auger testing, this time at the 42-acre Oakland Plantation. A total of 1,660 auger tests were excavated. A significant conclusion in their report was that, "the auger testing program has proved to be an efficient and comprehensive method for recovering archaeological baseline data."

Figure 5. Screening auger tests at 38CH2242, view to the northwest.

In both cases auger testing did precisely what the researchers wanted it to do – predict structure locations for additional research. Moreover, it achieves this goal in a timely and cost-effective manner. Auger testing is consistent in size (we used a 1-foot diameter bit) and depth – far more so than shovel testing which is affected by crew experience and stamina.

An interval of 20 feet was used based on Chicora's own work at various plantation sites, as well as the work by NPS. A total of 175 auger tests were opened, with all screened through ¼-inch mesh. The tests yielded 204 historic artifacts. Materials were transferred to Chicora's Columbia lab where they were cleaned and analyzed, allowing the data to be incorporated into a Surfer map using a natural neighbor gridding method. This method does not generate data in areas where no data exists, ignoring for example the woods to the west of the site.

Excavations

The minimal excavation unit was a 10 by 10 foot unit used for horizontal control. Chicora has adopted engineering measurements (feet and tenths of feet) for consistency in its work, especially on European sites where structural measurements are most often in feet.

The testing plan specified that at least 200 square feet would be manually excavated, with all fill screened through ¼-inch mesh. We were able to excavate 600 square feet – tripling the original estimate. All of these units were placed within 50 feet of the marsh edge, in an area we thought received little or no plowing. They were also in the area shown to exhibit relatively high-density remains based on the auger tests.

The excavations were by natural soil zones; although we found some of the site was extensively plowed, resulting in a plowzone overlying a sterile subsoil. There were plow scars and plow ridges in plowed areas, although generally these were partially removed with the

upper plowzone level. Flat shoveling was occasionally necessary in an effort to better reveal features, given the density of plowing. Unfortunately, no features were encountered in any of the units.

Excavation was by hand with all fill dry-screened through ¼-inch mesh using mechanical sifters.

A one-quart soil sample was collected from each provenience for soil chemistry needs.

Munsell soil color notations were made during the course of excavations, typically on moist soils freshly exposed. All materials except brick, mortar, and shell were retained by provenience. The brick, mortar, and shell from the screens were collected, weighed, and discarded in the field (Table 1).

Table 1.
Brick and Shell Weights
(in lbs., t=trace)

Unit	Shell	Brick
220R460, pz	2	t
220R480, lv 1	3	t
250R460, pz	1	t
270R440, pz	2	t
280R460, lv 1	3	t
360R420, lv 1	1	t
Totals	12	-

Each unit was troweled at the top of subsoil and digitally photographed. Units were drawn at a scale of 1-inch to 2-feet. Profiles were drawn at an exaggerated vertical scale of 1-inch to 1-foot, with a horizontal scale of 1-inch to 2-feet.

Findings

Auger Testing

Figure 6 shows the resulting historic artifact density map. It clearly reveals the absence of artifacts beyond the grid to the north and south. To the east, the site is limited by the marsh. To the west, there are several possible concentrations that deserve additional discussion. The seemingly dense areas at the western edge of the site consist of a few areas with auger tests producing multiple sherds that produced "bulls-eyes" when plotted. For example, the concentration at 280R240 consisted of nine small colono sherds. To the north, south, east, and west the auger tests produced no artifacts. Inland from the marsh edge the site has been plowed and we believe that these are artificial concentrations created by plow dispersion.

To verify this conclusion, we conducted shovel tests at 10-foot intervals around the densest concentration (280R240) and found no additional materials. The soils evidenced a plowzone on top of a subsoil.

The most pronounced concentrations were found along the marsh edge, an area where we believe there was limited plowing. Since this might help preserve features, our work focused in this area. The site appears to measure about 250 feet north-south by 100-200 feet east-west.

The distribution does not clearly reveal multiple structures, although it is possible, even likely, that several structures were present. The 1938 aerial reveals that vegetation along the marsh was very limited and the buffer developed only during the mid to late twentieth century. Therefore, it is possible that structures may have been blurred by earlier plowing. Nevertheless, there are at least three vague concentrations present.

Because of the low artifact density, we chose not to plot architectural artifacts or colono pottery as separate maps. Suffice it to say that both are consistent with the overall historic artifact density map.

Of the 175 auger tests, 80 or 46% produced 188 historic artifacts (Table 2). The most common historic artifact is colono ware pottery (n=165, found in 57 of the tests). Thus, about a third of the auger tests produced 88% of the collection. No more than three of any other historic artifact were recovered and often only single specimens were present. The bulk of these items were eighteenth century wares, such as lead glazed slipware, delft, and white saltglazed stoneware. Prehistoric sherds were present, but all were very fragmented by plowing (n=77). Eighteenth century architectural remains are virtually nonexistent, consisting of a single unidentifiable nail fragment. A single personal item was recovered – a Kidd and Kidd (1970) type IIb28 tube bead of milk glass with blue stripes. Brain (1979:105) identifies this type as his IIB13 and suggests a date range of 1699-1833, with a mean date of 1734.

There is a very weak nineteenth century assemblage, consisting of two undecorated whiteware fragments, a machine cut nail, and a white porcelain (South's Type 23) button. We believe these are accidental inclusions in the assemblage, perhaps deposited during farming activities.

Also recovered in the auger tests were two pieces of debitage – one rhyolite and the other chert.

If the auger tests are assumed to be generally

Table 2.
Artifacts Recovered from Auger Tests at 38CH2242

	white SGSW	delft, hp	lead glazed slipware	creamware, undec	whiteware, undec	clouded/ tortoiseshell ware	Nottingham	colono	glass, black	glass, clear	MC nail	UID nail	button	bead	pipestem, 5/64"	UID iron	flake, chert	flake, rhyolite	small PH
100R100													1						
120R120																			1
140R120								1											
100R140					1														
180R180																			1
180R200																3			
200R220								2											
220R220																			2
220R240																			1
260R240								1											
280R240								9											4
280R260								2											
300R260								1											
260R280																			1
280R280								1											
300R280								1											9
320R280																			4
200R300								1											
280R300																			1
300R300																			5
320R300								1											
140R320																			1
180R320								1											2
220R320								1											
280R320																			1
300R320								2											1
320R320							1	1				1							
360R320								3											
320R340																			1
360R340								1											
180R360								1											
200R360																			1
280R360																			2
300R360																			1
320R360																			1
340R360																			1
160R380								1											
200R380			1					2											
240R380																			1
320R380								1											
340R380								1											1
200R400								5											
220R400								3											2
240R400								1						1					
280R400								1											
320R400								1	1										
340R400																			1
360R400																			1
380R400																			1
200R420								2											2
220R420								3											3
240R420								2											
260R420				1				2	1								1		1
280R420								3											
300R420								6											2
320R420	1							2											2
360R420			1					3											
380R420								2											1
200R440								5											3
220R440								4											3
240R440								5											1
260R440					1			6											1
280R440								7			1								
300R440								3											2
340R440								3											
200R460								4		1									1
220R460								1											1
240R460								2											
260R460						1		2											
280R460		1						11							1				1
300R460								5											2
320R460			1					2	1										
340R460								1											
200R480								2											1
220R480								7											
240R480								4											
260R480								4										1	
280R480								8							1				2
200R500								4											
220R500								4											
Totlas	1	1	3	1	2	1	1	165	3	1	1	1	1	1	2	3	1	1	77

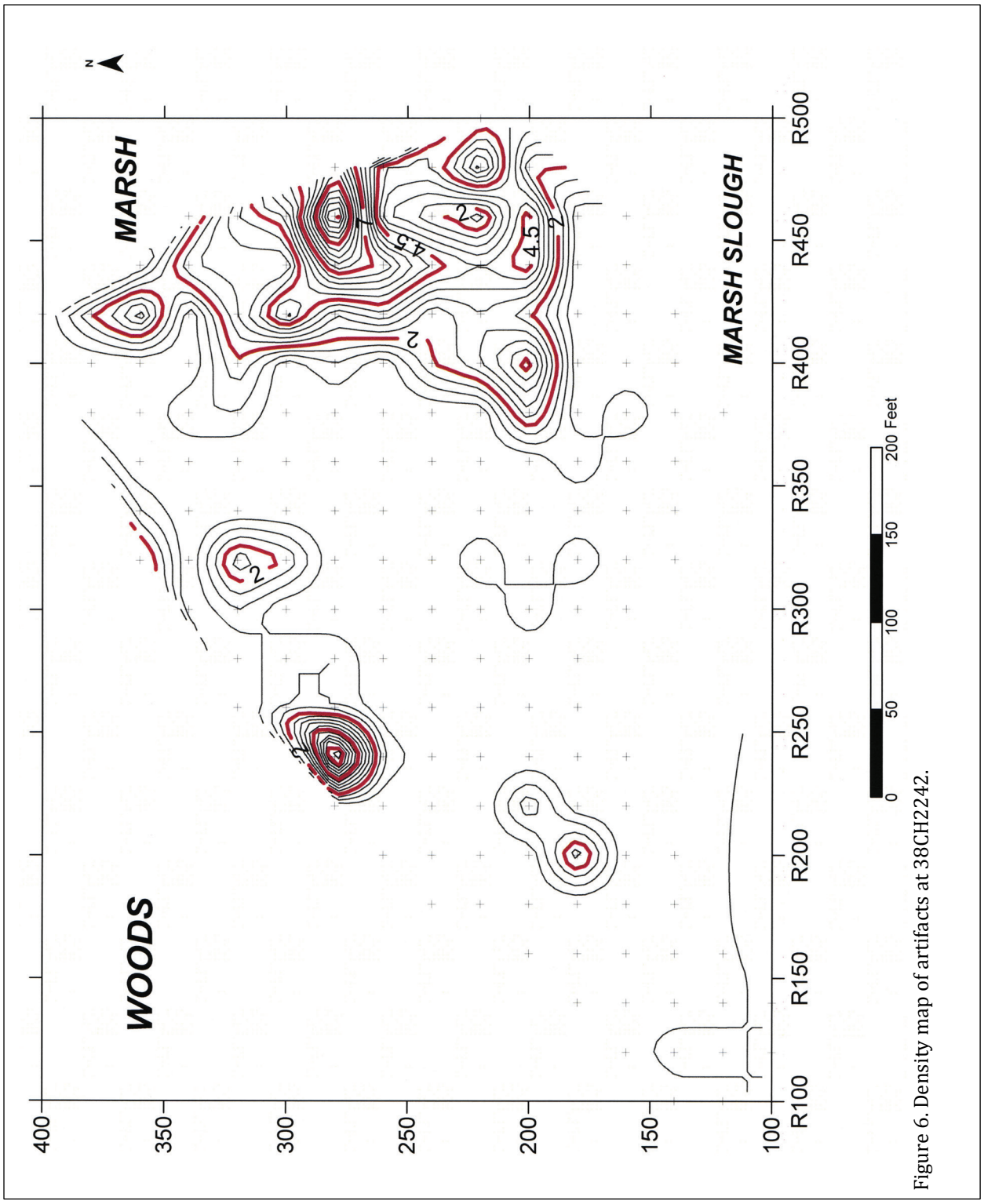

Figure 6. Density map of artifacts at 38CH2242.

representative of the entire site, and we see no good reason to conclude they aren't, then they are only vaguely similar to what has been identified in the past as the Carolina Artifact Pattern – a pattern thought to represent eighteenth century enslaved African Americans. In both cases, kitchen artifacts are the most common, but the similarity largely ends there. At 38CH2242 kitchen items are so overwhelming (comprising 96.2% of the eighteenth century items), that other artifacts hardly register. This artifact pattern seems far more constrained that that obtained in 2008, although the reason is not clear. Regardless, there is no reason, based on the auger tests, to assume any function for the site other than that of an eighteenth century slave settlement.

A slightly larger sample was available for a Mean Ceramic Date of the auger tests than was present in the 2008 shovel test sample. As a result, we can obtain a date of 1751 (Table 3). Because of the single creamware, this date is slightly more recent than the one obtained from the shovel test collection (1745.5).

Table 3.
Mean Ceramic Date for the Auger Test Collection at 38CH2242

Ceramic	Date Range	Mean Date (xi)	(fi)	fi x xi
Nottingham stoneware	1700-1810	1755	1	1755
White salt glazed stoneware	1740-1775	1758	1	1758
Lead glazed slipware	1670-1795	1733	3	5199
Clouded wares/Tortoiseshell	1740-1770	1755	1	1755
Delft, decorated	1600-1802	1750	1	1750
Creamware, undecorated	1762-1820	1791	1	1791
Total			8	14008
Mean Ceramic Date				1751

The prehistoric assemblage is heavily impacted by plowing, likely because the bulk of these remains came from the interior western portion of the site, where plowing has been well documented. The few sherds that could be identified include Deptford Check Stamped, Cape Fear Simple Stamped, and Cape Fear Cord Marked – all series that are primarily late Early Woodland or early Middle Woodland (perhaps 800 to 200 B.C.). The only other prehistoric artifacts were two single secondary flakes, one of rhyolite and the other of chert. No diagnostic lithics were recovered.

The results of the density map have been previously discussed (pages 6, 10-11). The map reveals a historic concentration along the edge of the marsh, largely limited to the tree line, which we believe had only limited plowing.

Excavations

Six units were excavated: 220R460, 220R480, 250R460, 270R440, 280R460, and 360R420 (Figure 7).

Unit **220R460** revealed limited plowing, likely at the edge of the field. The plowzone, a dark yellowish brown (10YR4/4) sand, was about 0.55 to 1.2 foot in depth and overlay a subsoil of brownish yellow (10YR6/6) sand. No features were identified at the base of the excavations.

Unit **220R480**, excavated further toward the marsh edge, revealed little evidence of plowing, although the artifacts were fragmented. Level 1 was 1.4 foot in depth and consisted of a dark yellowing brown (10YR3/4) sand. Below was a sandy, light brown (7.5YR6/4) subsoil. Only root stains were identifiable.

Unit **250R460** produced a plowzone of dark yellowish brown (10YR3/4) sand about 0.4 to 1.1 foot in depth. The underlying subsoil was a light brown (7.5YR6/4) sand. Plowscars were present running north-south and southwest-northeast, suggesting that the unit may have been at the edge of the field where plows were turning around.

Unit **270R44**0 exhibited a dense plowzone with abundant southwest-northeast plowscars. The plowzone was 1.5 feet deep, likely because it was at the edge of the field where soil was being thrown up. The soil was a dark yellowish brown (10YR3/4) sand and overlay a light brown (7.5YR6/4) sand subsoil.

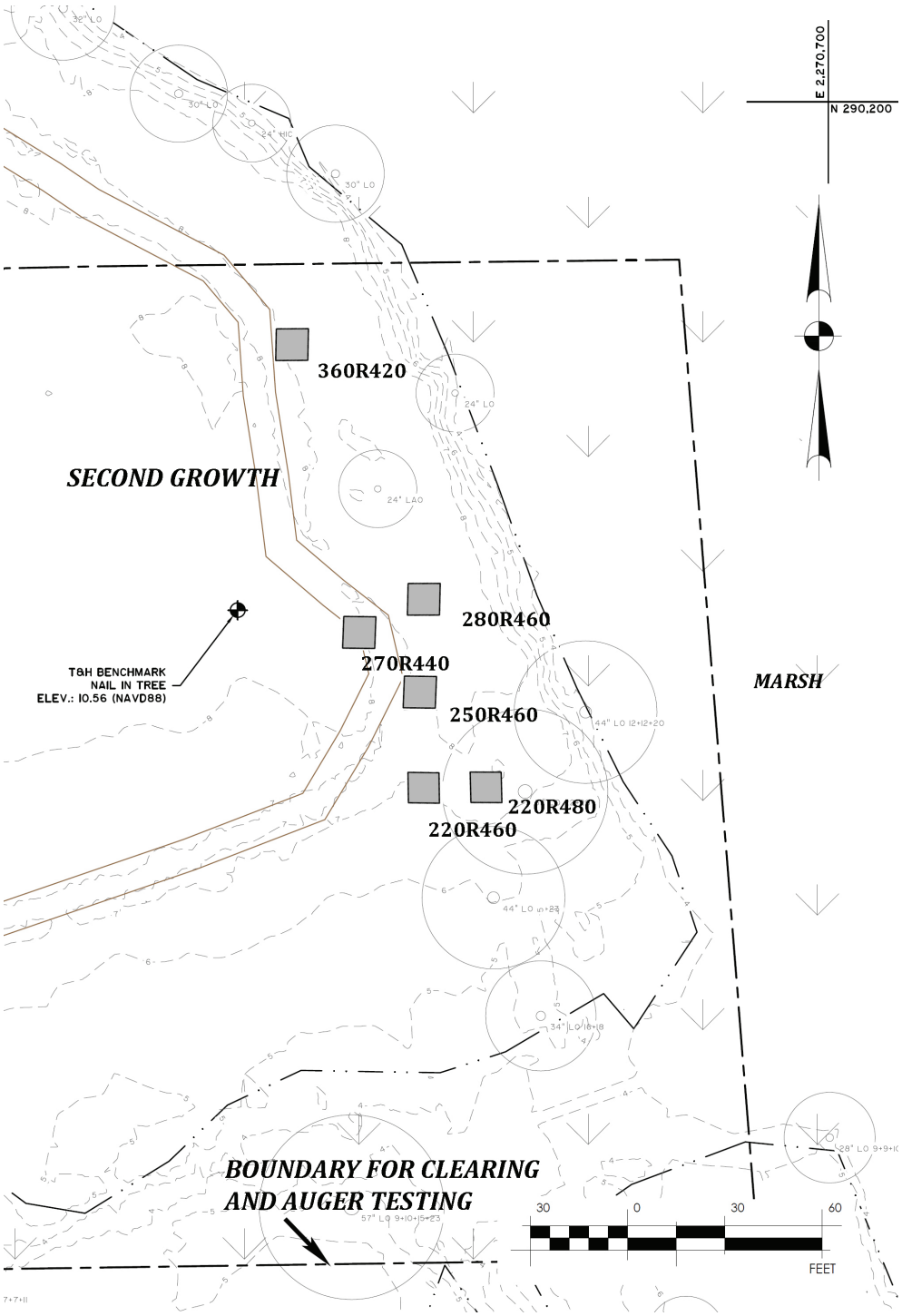

Figure 7. Excavation plan at 38CH2242.

Figure 8. Examples of excavation units. Upper photograph shows plowscars in 270R440; lower photo shows mottled subsoil in 280R460. Both views are to the north.

Unit **280R460** produced a very mottled subsoil of light brown (7.5YR6/4) sand. The overlying soil, identified as Level 1, was a dark brown (10YR3/4) sand.

The final unit, **360R420**, at the north edge of the site, was similar to 280R460 in that it failed to produce evidence of plowing. Level 1 was only 0.5 to 0.8 foot in depth and consisted of a dark yellowish brown (10YR3/4) sand resting on a mottled light brown (7.5YR6/4) sand subsoil.

Artifacts

Formal excavations produced 3,041 artifacts (Table 4). The most abundant of these were colono wares – low fired, slave-made earthenwares. The colono pottery (n=1,351) accounts for 44.4% of the assemblage. The most abundant European ware was lead glazed slipware, which accounts for only 0.8% of the total collection (n=26). The colono accounts for nearly 94.1% of the ceramics and the lead glazed slipware contributes only an additional 1.8%.

We have previously reviewed the different typologies applied to colono pottery (Trinkley and Hacker 2016:265-269). Even a cursory review will suggest that there is considerable overlap between the various types, and defining features are often not present in relatively small plowzone collections. Nevertheless, the assemblage from 38CH2242 is most similar to what Anthony (1986, 2002, 2009) has called Lesesne Lustered. Bulbous lips appear as a variant of both rounded (found on 44.1% of the rims) and flattened rims(accounting for the remaining 55.9%). The paste is a fine, almost micaceous, sand. Sherds are well fired, primarily reduced. Surfaces are lustrous, well-smoothed, but most lack the tooling facets found on River Burnished pottery. A sample of non-rim sherds have an average thickness of 5.43mm (SD=0.95mm; n=140). These are within the range attributed to Lesesne Lustered, although there is considerable overlap. Some notched rims are found. In another case, wear suggestive of a lid was found on a rim. Twenty-one spalls were recovered from this site – the most found at any of the Mullet Hall sites. These spalls are typical firing accidents and indicate that at least some of the pottery was being produced at the site since firing failures are unlikely to be distributed far from the place of firing.

The collection produced three handles (suggesting the replication of European styles), one vessel foot, and four fragments of what appears to be a pipe.

Red clay pipes are rare in the colonies, but are found in large quantities from Port Royal, Jamaica, apparently dating from the late seventeenth and early eighteenth centuries. Since they were first found in Jamaica, archaeologists have debated whether they were manufactured by Native Americans, African Americans, European colonists, European pipe-makers, or all four (for some of these discussions see South 2002 and Veit 2002).

It seems that relatively few archaeologists have explored the paste of these pipes in an effort to ascertain the locality of manufacture. An early effort examined a small sample of Jamaican pipes using neutron activation. The study found that clays of slightly different colors had nearly identical chemical composition, strongly suggesting that the variation was related to firing and not clay source. In addition, the examined samples appear very similar to a Jamaican clay sample (Heidtke 1992:56).

In another study, x-ray diffraction and energy dispersive X-ray spectrometry were used to compare Virginia red clay pipe samples to local clays. The research identified clear elemental differences between white clay and red clay pipes, which the authors note was “undoubtedly due to the former probably being made from clay from Devon, England, whereas the latter was probably made from Virginia clays” (Key and Jones 2000:90-91).

While the studies do not determine who made the pipes, they do suggest local manufacture. Moreover, insofar as the data derived from different techniques can be compared, the Jamaica

Table 4.
Artifacts Recovered from Formal Excavations.

	220R460, pz	220R480, lv 1	250R460, pz	270R440, pz	280R460, lv 1	360R420, lv 1		
Kitchen Group							1436	95.3
White SG SW	1							
Delft, undecorated	1	1						
Delft, blue hand painted	1		1	2	1			
Lead glazed slipware	6	4	4	4	7	1		
Whiteware, undecorated				1	2			
Whiteware, blue edged				2				
Tortoiseshell	1	1	1		2			
Nottingham		8	3					
Gray SG SW			1					
Brown SG SW		1						
Red earthenware		7	1					
Glass, black				4	5			
Glass, aqua			1		1			
Glass, brown			6					
Glass, clear	1		1					
Glass, manganese			1					
Colono ware	176	455	172	247	254	47		
Architecture Group							1	0.1
Window glass	1							
Furniture Group							0	0.0
Arms Group							7	0.5
Lead shot			1	2				
Gunflint		1	1					
Gunflint flakes	1	1						
Tobacco Group							45	3.0
Pipe stems, 4/64-inch			1		2	1		
Pipe stems, 5/64-inch	2	6	1	6	4	1		
Pipe stems, 6/64-inch		1						
Pipe bowl fragments	6	9	3	2				
Clothing Group							0	0.0
Personal Group							11	0.7
Beads	1	4	5	1				
Activities Group							7	0.5
Construction tools		1						
Misc. hardware	1							
Other	2			1	1	1		
TOTAL	201	500	204	272	279	51	1,507	

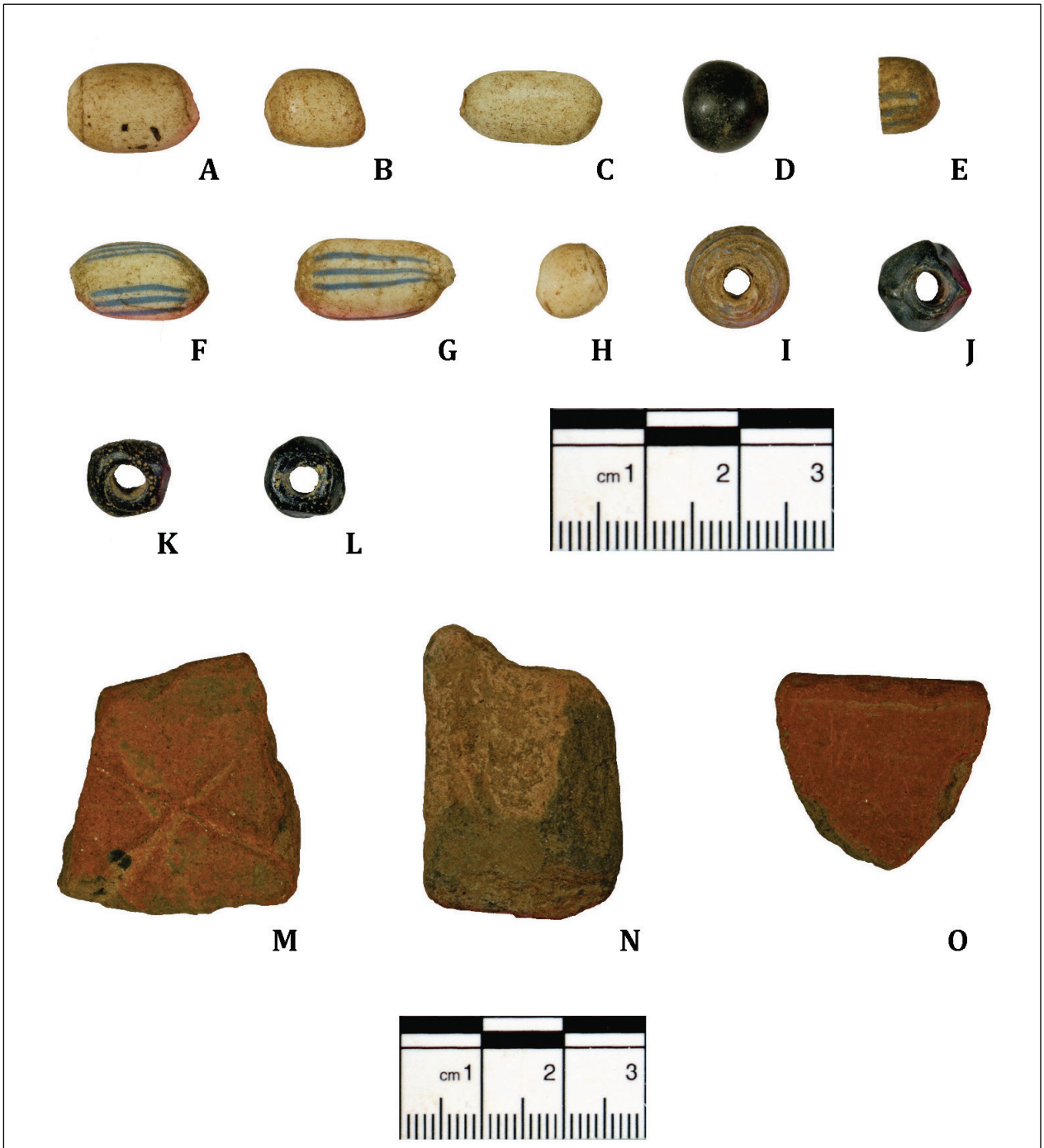

Figure 9. Artifacts recovered from 38CH2242. A-D, Kidd and Kidd Type IIa beads; E-G, Kidd and Kidd Type IIb beads; H, Kidd and Kidd Type W1b bead; I. Kidd and Kidd Type WId bead; J-K, Kidd and Kidd Type WIIc beads; M, colono ware sherd with an engraved "X" on the exterior surface; N, fragment of colono ware handle; O, colono ware rim with burnishing facets.

and Virginia clays do not seem similar – suggesting that the Virginia pipes did not originate in the Caribbean.

One colono body sherd exhibits an "X" scratched into the surface when the pottery was leather hard, but prior to firing. While Ferguson (1992; see also Orser 1994) has identified such marks on the interior or exterior base of bowls and associated them with Bakongo cosmograms, the single example from 38CH2242 is smaller and located on a side wall. Its function is unknown.

Utilitarian wares dominate the kitchen ceramics, with very few more expensive wares present.

As was the case with the auger tests, the excavation assemblage produced a small assortment of nineteenth century materials that likely have nothing to do with the slave settlement at 38CH2242. These items include several whitewares and a fragment of manganese glass.

Architectural items are exceedingly rare, consisting of a single small fragment of window glass. It seems likely that the structures present were wall trench buildings that required few nails and probably lacked glazed windows.

Arms related items include three lead shot, ranging in size from 8.75 to 15.08 mm. These are today all considered buck shot, with the largest sometimes called Triball 12. Nobel explains that,

> Differences in shot size are correlated with the type of bird or small game to be hunted. It is inferred here that such was also the case in the past. It seem probable that the smaller 3 mm. to 4 mm. shot in the bimodal frequency curve are convenient sizes for shooting ducks, grouse, pheasants, pigeons or other upland game birds. The second curve in the bimodal frequency represents larger shot sizes between 4.5 mm. and 6 mm. These sizes are effective in shooting geese, swans, cranes or small game such as rabbits and beaver. Frequently the early traders' documents refer to different types of shot (e.g., swan shot, beaver shot and bird shot) (Nobel 1973:122).

Present were two gunflints, one manufactured from gray flint and thus almost certainly English and the other manufactured from honey colored flint and likely French. There were also two flint flakes or spalls, both gray and likely from efforts to produce or resharpen English flints.

A total of 45 tobacco related items (not including the previously discussed probable colono ware pipe) were recovered. Twenty-five of the items are stems, with 5/64-inch diameter bores accounting for 20 of these specimens. The 20 pipe bowl fragments were primarily undecorated, although one was recovered with unidentifiable writing and other with a floral motif.

Beads are very common, with 11 specimens recovered from formal excavations. These are briefly summarized in Table 5.

Table 5.
Beads Recovered in Formal Excavations

Provenience	Type	Colors	Length	Diameter
220R460, pz	IIb	white/blue	>6.3	8.0
220R480, lv 1	IIa	white	15.5	7.9
	IIb	white/blue	14.9	8.1
	WIIc	blue	8.3	5.7
	WIIc	blue faceted	9.2	7.1
250R460, pz	IIa	black	9.0	9.9
	IIa	white	9.6	8.1
	WIb	white	7.1	7.6
	WId	clear	5.8	10.8
	WIIc	blue	4.7	8.9
270R440, pz	IIa	white	13.1	8.9

Status

Although we have a larger collection obtained through excavation, the artifact pattern at 38CH2242 is no clearer (Table 6), matching none of the previously defined patterns. The issue is that ceramics – largely colono wares – are so prevalent that other remains almost disappear statistically. Ignoring this one discrepancy, the assemblage most closely resembles the eighteenth century slave artifact pattern, although personal items are inflated by the abundance of beads recovered from the site.

Table 6.
Artifact Pattern Analysis for the 38CH2242 collection.

				38BK1900 Area B			
	38CH1543	Revised Carolina Artifact Pattern[1]	Carolina Elite Pattern[2]	18th Cen. Overseer[3]	38CH1278 18th Cen. Overseer[4]	Carolina Slave Artifact Pattern[1]	Georgia Slave Artifact Pattern[5]
Kitchen	95.3	51.8-65.0	42.1-64.2	65.2	78.1	70.9-84.2	20.0-25.8
Architecture	0.1	25.2-31.4	26.5-55.8	21.2	8.9	11.8-24.8	67.9-73.2
Furniture	0.0	0.2-0.6	0.1-0.8	0	0.1	0.1	0.0-0.1
Arms	0.5	0.1-0.3	0.1-1.0	0.3	0.2	0.1-0.3	0.0-0.2
Tobacco	3.0	1.9-13.9	0.2-4.7	10.2	11.4	2.4-5.4	0.3-9.7
Clothing	0.0	0.6-5.4	0.1-0.3	0.1	0.2	0.3-0.8	0.3-1.7
Personal	0.7	0.2-0.5	0.1-1.1	0.1	0.2	0.1	0.1-0.2
Activities	0.5	0.9-1.7	0.2-1.6	2.9	1.1	0.2-0.9	0.2-0.4

[1]Garrow 1982
[2]Beaman 2001
[3]Trinkley et al. 2003
[4]Trinkley et al. 2005
[5]Singleton 1980

In any event, while the pattern is not a particularly close match, it certainly seems to represent a low status slave occupation.

Dating

If we exclude the whitewares, thought to have likely been intrusive, then the mean ceramic date for 38CH2242 is 1742 (Table 7). Even if these few later wares are added, the mean date is increased by only a decade to 1752.

Of course, there are a variety of other dating methods. For example, again ignoring the pearlwares, whitewares, and yellow wares, South's Bracketing Dates are 1700 to 1740, slightly earlier than the mean date.

Since South's method only uses ceramic types to determine approximate period of occupation, Salwen and Bridges (1977) argue that ceramic types that have high counts are poorly represented in the ceramic assemblage. Because of this valid complaint, a second method – a ceramic probability contribution chart – was used to determine occupation spans. Bartovics (1981) advocates the calculation of probability distributions for ceramic types within an assemblage. Using this technique, an approximation of the probability of a ceramic type contribution to the site's occupation is derived. This formula is expressed:

Table 7.
Mean Ceramic Date for 38CH2242.

Ceramic	Date Range	Mean Date (xi)	(fi)	fi x xi
Nottingham stoneware	1700-1810	1755	11	19305
White salt glazed stoneware	1740-1775	1758	1	1758
Lead glazed slipware	1670-1795	1733	26	45058
Clouded wares/Tortoiseshell	1740-1770	1755	5	8775
Delft, decorated	1600-1802	1750	5	8750
Delft, plain	1640-1800	1720	2	3440
Total			50	87086
Mean Ceramic Date				1741.72

$$\frac{Pj}{yr.} = \frac{fj}{F \;\; x \;\; Dj}$$

where

Pj = partial probability contribution,
fj = number of sherds in type j,
F = number of sherds in sample, and
Dj = duration in range of years.

Thus, the Bartovic date range is 1661 to 1796, while the Salwen and Bridges Ceramic Probability Contributions suggest a range from 1670 through 1795.

All of these dates are similar, indicating an occupation at 38CH2242 beginning shortly after the establishment of Charleston and ending sometime before the end of the eighteenth century. In fact, given the artifact assemblage it seems reasonable that the settlement was abandoned prior to the Revolution.

Tobacco stem bore diameter is yet another dating technique, although it is applicable only to those sites pre-dating 1780. Thus, 38CH2242 may be at the outside edge of the range. Nevertheless, there are essentially three different dating formula: Binford's (1962) linear formula, Hanson's formulas (Hanson 1968, recanted in 1971; see also Binford 1971), and the Heighton and Deagan (1971) formula. The three formulas have been tested by McMillan (2010) at 26 sites from Maryland, Virginia, North Carolina, and South Carolina. She found that the Heighton and Degan method proved to be the most accurate, producing formula mean dates closest to the dates assigned using other techniques. She also found all of the techniques worked better in Maryland and Virginia than in North or South Carolina.

Table 8.
Tobacco Stem Dating.

	Bore Diameter	#		
4	4/64	4	16	
5	5/64	20	100	
6	6/64	1	6	
		25	122	
	average bore diameter		4.88	
	Binford Date			1745
	log of average bore diameter		0.68842	
			6.68539	
	Heighton and Deagan Date			1747

The resulting dates, shown in Table 8, are close to one another – 1745 and 1747. These are both slightly later than the Mean Ceramic Date of 1746, but still plausible.

Thus, all the dating approaches support 38CH1543 being occupied during the early eighteenth century. When the historic research is consulted, it appears that the site was occupied during, and perhaps before, the occupation of James Witter.

Prehistoric Remains

The excavations produced 229 prehistoric artifacts, most of which (n=172, or 75%) were small sherds not further analyzed (Table 9). There were 57 sherds large enough to be further identified and most of these (79%, n=45) were Irene/Pee Dee Complicated Stamped. One additional sherd was decorated with hollow reed punctations, a common decorative technique for Irene/Pee Dee.

The remaining sherds represented five different types, ranging from the Early to Late Woodland.

Also present were four lithics. Two were fragmentary bifaces and the remaining two were Early and Middle Archaic Kirk and Morrow Mountain point fragments. The basal fragment of the Kirk measures 27.55 in width and is 10.74mm in thickness. The Morrow Mountain, also represented by only the base, measures 14.66 in length and 7.77mm in thickness.

These remains suggest that while there were occasional settlements or visits from the Middle Archaic through the Late Woodland, it wasn't until the Mississippian Period that any significant occupation took place in the area.

Ethnobotanical Remains

Ethnobotanical remains were recovered only from unit excavations by handpicking during excavation.

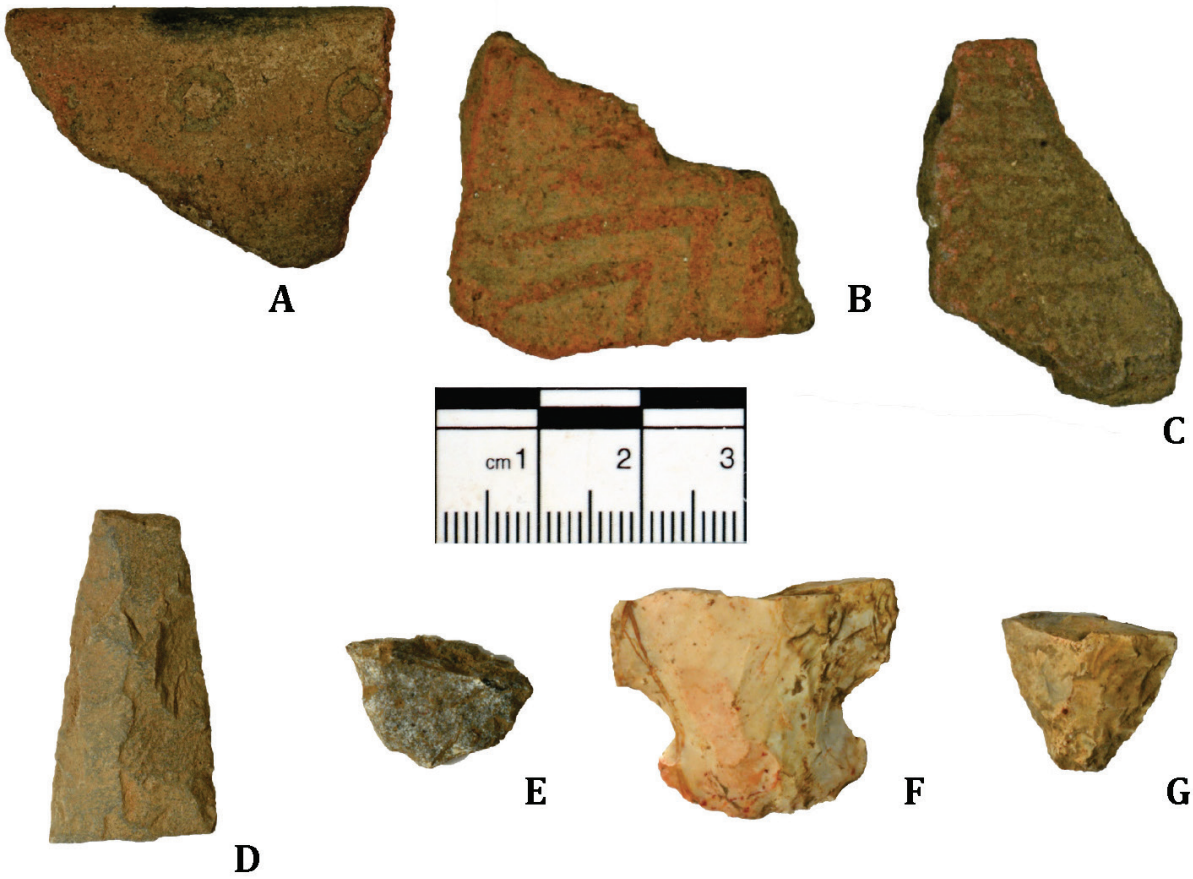

Figure 10. Prehistoric artifacts from 38CH2242. A-C, Irene/Pee Dee punctate and complicated stamped; D. rhyolitic biface fragment; E, burned chert biface fragment; F. chert Kirk Corner Notched basal fragment; G. chert Morrow Mountain II basal fragment.

Hand-picked (or even waterscreened samples in some cases) may produce little information on subsistence since they often represent primarily wood charcoal large enough to be readily collected during either excavation or screening. Such hand-picked samples are perhaps most useful for providing ecological information through examination of the wood species present.

Such studies assume that charcoal from different species tends to burn, fragment, and be preserved similarly so that no species naturally produce smaller, or less common, pieces of charcoal and is less likely than others to be represented – an assumption that is dangerous at best. Such studies also assume that the wood was being collected in the same proportions by the site occupants as the charcoal found in the archaeological record—likely, but very difficult to examine in any detail. And finally, an examination of wood species may also assume that the species present represent woods intentionally selected by the site occupants for use as fuel or other purposes – probably the easiest assumption to accept if due care is used to exclude the results of natural fires.

While this method probably gives a fair indication of the trees in the site area at the time of occupation, there are several factors that may bias any environmental reconstruction based solely on

Table 9.
Prehistoric Artifacts.

	220R460, pz	220R480, lv 1	250R460, pz	270R440, pz	280R460, lv 1	360R420, lv 1	Totals
Thom's Creek							
Reed Punctate			1				1
Deptford							
Check Stamped				1		2	3
Wilmington							
Cord Marked			3				3
Fabric Impressed			2				2
St. Catherines							
Fabric Impressed					2		2
Irene/Pee Dee							
Linear Punctate		1					1
Comp Stamp		20	5	4	14	2	45
Small Sherds	17	52	16	36	32	19	172
Bifaces							
Rhyolite			1				1
Chert			1				1
Projectile Points							
Kirk Corner Notched, chert					1		1
Morrow Mountain II, chert				1			1

charcoal evidence, including selective gathering by site occupants (perhaps selecting better burning woods, while excluding others) and differential self-pruning of the trees (providing greater availability of some species over others). Smart and Hoffman (1988) provide an excellent review of environment interpretation using charcoal that should be consulted by those particularly interested in this aspect of the study.

The hand-picked samples were bagged in the field directly from the ¼-inch screen excavation and were therefore clean and easily sorted. The samples were examined under low magnification with the larger pieces of wood charcoal identified, where possible, to the genus level using comparative samples, Edlin (1969), Hoadley (1990), Koehler (1917), and Panshin and de Zeeuw (1970). Wood charcoal samples were broken in half to expose a fresh transverse surface. The results of this analysis are shown in Table 10. Wood counts, rather than weights, are used to quantify the significance of the various taxa since different woods will have dramatically different properties that affect overall preservation (see, for example, Bonhage-Freund 2005).

The most abundant wood was pine (*Pinus* sp.). This is typical of most southeastern sites. Many of these specimens appear to be in the subclass of Southern Yellow Pines, which includes loblolly, shortleaf, longleaf, slash, and pitch pine (Hoardley 1990:147). This may reflect the density of the species, or it may only reflect that pine is a good self-pruner, making its wood readily accessible.

By the antebellum, pines were common in the Carolina low country. Commenting on the prevalence of pines, found usually with "only a very few back-jack oaks," Edmund Ruffin observed that they were found on "the dryest [sic] land" whose surface is "sandy & dry" (Mathew 1992:74).

Well known for their naval stores and often used for building materials, pines might be found in a variety of settings. Although the function of the recovered wood is uncertain, its presence as widely dispersed and carbonized suggests that for the most part we are looking at remnants of building construction and fuel wood.

The only other wood present was a small quantity of holly, probably yaupon (*Illex*

Table 10.
Ethnobotanical Remains Identified at 38CH2242.

Provenience	*Pinus sp.*	*Ilex sp.*	UID
220R480, lv 1	++		
250R460, pz	++	++	+
270R440, pz	+		
360R420, lv 1	+	+	

vomitoria). This is a common sea island plant used extensively by Native Americans, roasting the leaves and shoots to make a dark, tea-like drink known as the "black drink." Used medicinally and ritually, it produced vomiting and was thought to purify the body. Both Porcher (1991:394-395) and Morton (1974:81-82) mention the historic uses of this plant as an emetic and diuretic.

Assessment

Data Sets

Colono wares are the largest data set at 38CH1543, although they are compromised by extensive plowing and fragmentation. Nevertheless, they were sufficient to be typed as Lesesne and data were obtained regarding rim form. European ceramics were also present, although they, too, were heavily fragmented. Other artifacts are less common, although that is attributed to the site's probable function as an eighteenth century slave settlement. One interesting anomaly was the large number of glass beads recovered from the settlement – all of which appear to be eighteenth century in origin.

The density of the colono pottery has produced an artifact pattern that does not match those found previously at eighteenth century slave settlements. We suggest this may be the result of the very early date of the settlement, coupled with site-specific features that are not entirely clear.

Plowing was deep and only three units lack evidence of plowing. All of these are situated close to the marsh. No features were identified in the excavations. This is most likely a result of the intensive plowing.

Lacking features, faunal remains are not abundant and it is unlikely, given the plowing, that significant numbers will be found.

Other specialized remains, such as pollen and phytoliths, absent features, were not recovered. Even mortar and bricks are not common, although this may be the result of earthfast housing.

Therefore, the data sets at 38CH1543 appear to be limited to artifacts such as ceramics, most specifically colono wares.

Historic Context

We have provided a brief synopsis of the historic context, focusing on eighteenth century owners such as James Witter, about whom little is known. We suspect rice cultivation, but we have almost no documentations that would help reconstruction daily plantation activities.

Given the early age of this settlement (with dates from the middle of the eighteenth century), 38CH2242 tells a very important story about the enslaved African Americans laboring on the island. It is especially useful when compared to 38CH1541, 38CH1543, and 38CH2244, all settlements where African Americans from roughly the same period lived.

Its small size seems to stand in contrast with other sites, such as Yaughan and Curriboo, where relatively large number of slaves were housed in a village-like setting (Wheaton et al. 1983).

Research Questions

Given the dearth of historic records and accounts, there are abundant research questions, many focusing on the lifeways of the enslaved: In what type of structures did they live? How many structures were present at 38CH2242? Can it be determined how many of these structures are rebuilds? Can the length of the occupation be estimated? How many enslaved African Americans may have lived there? What were the foodways of these African Americans? Left to their own devices, did they subsist primarily on game or fish they captured? What evidence of plant foods may be

present? Is there any evidence – artifactual or ecofactual – for rice cultivation? How were lifeways in this small village different from those in the nineteenth century? Why were there multiple small hamlets rather than a single village? Were these hamlets based on family connections or proximity to work?

The vast majority of these questions, we believe, are significant. Archaeologists have focused on easy answers, taking one or two slave settlements and stretching the data to fit virtually every other slave settlement of that general time period. Thus, when we think of eighteenth century slave settlements, we think of the large villages of Yaughan and Curriboo; we do not think of a small hamlet such as 38CH2242.

Integrity

Regardless of how important the questions may be, it is essential that we have some likelihood of addressing those questions with the data at hand. This makes the assessment process more difficult since good questions are easy to come by, while good data are far more difficult to find.

At 38CH2242, the extent of plowing has affected a broad range of data sources. Artifacts are both fragmented and dispersed. All artifacts, but ethnobotanical and zooarchaeological remains in particular, are likely to be damaged and made more difficult to recover. The depth of plowing has affected the potential for feature recovery. The remaining area free of plowing is a narrow strip along the edge of the marsh where a number of large trees are now present.

We do not believe that the site possesses the integrity to permit the block excavations necessary to identify features, especially structures.

Recommendations

While interior areas may be affected by neighborhood construction, the area immediately adjacent to the marsh will likely be a buffer area. Consequently, after this careful consideration, we believe that 38CH2242 is not eligible for inclusion on the National Register of Historic Places.

Although we do not propose additional investigations at 38CH2242, we believe that the information already obtained will be useful in comparison with other eighteenth century African American settlements at Mullet Hall and on Johns Island. In particular, we hope that additional research will help us better understand the artifact pattern exhibited by this site.

It is possible that unusual concentrations or types of archaeological remains will be encountered in the area during construction. As always, the developer's contractors should be advised to report any discoveries of artifact concentrations (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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